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(54) Title: HYPERBRANCHED AMPHIPHILIC POLYMERIC ADDITIVES AND POLYMER COMPOSITIONS WITH INCREASED SURFACE ENERGY

(57) Abstract: The surface energy of polymeric substrates is increased by the application or incorporation of novel amphiphilic block copolymers. The block copolymer additives comprise a linear hydrophilic polymer or oligomer and a random hyperbranched polymer or oligomer and is completely or partially terminated with lipophilic end groups. The polymeric articles or construction which benefit from the application or incorporation of the amphiphilic block copolymers in the areas of anti-fog, dissipation of static electricity, paintability, dyeability, printability, wicking of moisture, adhesion and polymer compatibility include carpet fibers, composite fibers, agricultural films, nonwoven coverstock, exterior automotive bumper fascia, packaging, hygienic products, incompatible polymer blends, laminated articles and eyewear.

INTERNATIONAL SEARCH REPORT

Int. Application No
PCT/EP 01/01114

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C08G83/00 C08G81/00 C08L101/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C08G C08L C09J C09D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 136 014 A (FIGULY GARRET D) 4 August 1992 (1992-08-04) claims 1,15 column 6, line 5 - line 12 ---	1
A	WO 97 45474 A (MAANSSON JAN ANDERS EDVIN ;BOOGH LOUIS (CH); PERSTORP AB (SE); PET) 4 December 1997 (1997-12-04) cited in the application claim 1 ---	1
A	GB 2 339 202 A (EASTMAN KODAK CO) 19 January 2000 (2000-01-19) claims 15,20,21 ---	1 -/-



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WOOLEY K.L. AND FRÉCHET J.M.: "The Preparation of Hybrid Dendritic-Linear Block Copolymers"</p> <p>PROCEEDINGS OF THE AMERICAN CHEMICAL SOCIETY. DIVISION OF POLYMERIC MATERIALS: SCIENCE AND ENGINEERING, vol. 66, 1992, pages 90-91, XP002169294</p> <p>San Francisco, California, USA</p> <p>the whole document</p> <p>---</p>	1
P,A	<p>WO 00 11058 A (CIRCE BIOMEDICAL INC)</p> <p>2 March 2000 (2000-03-02)</p> <p>claim 1; figure 1</p> <p>page 11, line 10; claim 30</p> <p>-----</p>	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int'l	Application No
PCT/EP 01/01114	

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
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